WHAT IS CLAIMED IS:

1. An abnormality detection device for detecting an abnormality in a communication bus, the device comprising:

a timer counter connected to said communication bus so as to measure a time during which a signal having a first logical level is transmitted in said communication bus; and

a comparator outputting an abnormality detection signal indicating an abnormality in said communication bus when the time measured by said timer counter surpasses a threshold value.

2. The abnormality detection device as claimed in claim 1, wherein said timer counter is initialized at intervals determined according to an event signal supplied thereto.

3. The abnormality detection device as claimed in claim 2, comprising at least two units of said timer counter and said comparator, the timer counter in each of said units being individually initialized at said intervals.

4. The abnormality detection device as claimed in claim 1, further comprising:

a plurality of comparison value registers respectively storing a plurality of threshold values; and

a selector selecting a threshold value from among said plurality of said threshold values according to a selection signal supplied thereto so as to supply said threshold value to said comparator.

5. An abnormality detection device for detecting an abnormality in a communication bus, the device comprising:

at least two timer counters each connected to said communication bus so as to measure a time during which a signal having a first logical level is transmitted in said communication bus;

a register cumulatively adding the time measured by at least one of said at least two timer counters, the register being initialized at predetermined intervals; and

a comparator outputting an abnormality detection signal indicating an abnormality in said communication bus when a cumulative time obtained by said register surpasses a threshold value.

6. The abnormality detection device as claimed in claim 5,

wherein said register supplies said cumulative time to at least one of said at least two timer counters, and

said at least one of said at least two timer counters measures the time by using said cumulative time as an initial value.

7. A microcomputer connected to a communication bus, the microcomputer comprising:

a timer counter connected to said communication bus so as to measure a time during which a signal having a first logical level is transmitted in said communication bus; and

a comparator outputting an abnormality detection signal indicating an abnormality in said communication bus when the time measured by said timer counter surpasses a threshold value.